

Please type a plus sign (+) inside this box →

+

PTO/SB/05 (1/98)

UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No. 2420-0011

First Inventor or Application Identifier: David Weiss

Title: MEDIA BRIDGE METHOD AND APPARATUS

Express Mail Label No.

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

ADDRESS TO:

Assistant Commissioner for Patents
Box Patent Application
Washington, DC 20231

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)
(Submit an original, and a duplicate for fee processing)
2. ☒ Specification Total Pages [18]
(preferred arrangement set forth below)
 - Descriptive title of the Invention
 - Cross References to Related Applications
 - Statement Regarding Fed sponsored R & D
 - Reference to Microfiche Appendix
 - Background of the Invention
 - Brief Summary of the Invention
 - Brief Description of the Drawings (if filed)
 - Detailed Description
 - Claim(s)
 - Abstract of the Disclosure
3. ☒ Drawing(s) (35 USC 113) Total Sheets [4]
4. ☒ Oath or Declaration Total Pages [3]
 - a. ☒ Newly executed (original or copy)
 - b. ☐ Copy from a prior application (37 CFR 1.63(d))
(for continuation/divisional with Box 17 completed)
[Note Box 5 below]
 - i. ☐ DELETION OF INVENTOR(S)
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
5. ☐ Incorporation By Reference (useable if Box 4b is checked)
The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 4b, is considered to be part of the disclosure of the accompanying application and is hereby incorporated by reference therein

6. ☐ Microfiche Computer Program (Appendix)
7. Nucleotide and/or Amino Acid Sequence Submission
(if applicable, all necessary)
 - a. ☐ Computer Readable Copy
 - b. ☐ Paper Copy (identical to computer copy)
 - c. ☐ Statement verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

8. ☒ Assignment Papers (cover sheet & document(s))
9. ☐ 37 CFR 3.73(b) Statement ☐ Power of Attorney
(when there is an assignee)
10. ☐ English Translation Document (if applicable)
11. ☒ Information Disclosure Statement ☒ Copies of IDS
(IDS)/PTO-1449 Citations
12. ☐ Preliminary Amendment
13. ☒ Return Receipt Postcard (MPEP 503)
(Should be specifically itemized)
14. ☒ *Small Entity ☐ Statement filed in prior application,
Statement(s) Status still proper and desired
(PTO/SB/09-12)
15. ☐ Certified Copy of Priority Document(s)
(if foreign priority is claimed)
16. ☐ Other.

*A new statement is required to be entitled to pay small entity fees, except where one has been filed in a prior application and is being relied upon.

17. If a **CONTINUING APPLICATION**, check appropriate box, and supply the requisite information below and in a preliminary amendment
- ☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No. _____
- Prior application information: Examiner: _____ Group/Art Unit: _____

18. CORRESPONDENCE ADDRESS

☒ Customer Number or Bar Code Label Customer No. 22204 ☐ Correspondence address below

(Insert Customer No. or Attach bar code label here)

Name Marc S Kaufman
Firm NIXON PEABODY LLP
Address 8180 Greensboro Drive, Suite 800
City McLean State VA Zip Code 22102
Country U S A Telephone (703) 790-9110 FAX (703) 883-0370

Name (Print/Type) Marc S. Kaufman

Registration No. (Attorney/Agent) 35,212

Signature

Date: February 17, 2000

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231

**STATEMENT CLAIMING SMALL ENTITY STATUS
(37 CFR 1.9(f) & 1.27(c))—SMALL BUSINESS CONCERN**Docket Number (Optional)
2420-0011Applicant, Patentee, or Identifier: David Weiss
Application or Patent No.: new patent application
Filed or Issued:
Title: MEDIA BRIDGE METHOD AND APPARATUS

I hereby state that I am

- ☒
- the owner of the small business concern identified below:
-
- ☐
- an official of the small business concern empowered to act on behalf of the concern identified below:

NAME OF SMALL BUSINESS CONCERN: Organon Wireless, Inc.ADDRESS OF SMALL BUSINESS CONCERN: 1844 North Nob Hill Road, Suite 233, Plantation, Florida 33322
USA

I hereby state that the above identified small business concern qualifies as a small business concern as defined in 13 CFR Part 121 for purposes of paying reduced fees to the United States Patent and Trademark Office. Questions related to size standards for a small business concern may be directed to: Small Business Administration, Size Standards Staff, 409 Third Street, SW, Washington, DC 20416.

I hereby state that the rights under contract or law have been conveyed to and remain with the small business concern identified above with regard to the invention described in:

- ☒
- the specification filed herewith with title as listed above.
-
- ☐
- the application identified above.
-
- ☐
- the patent identified above.

If the rights held by the above identified small business concern are not exclusive, each individual, concern, or organization having rights in the invention must file separate statements as to their status as small entities, and no rights to the invention are held by any person, other than the inventor, who would not qualify as an independent inventor under 37 CFR 1.9(c) if that person made the invention, or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d), or a nonprofit organization under 37 CFR 1.9(e).

Each person, concern, or organization having any rights in the invention is listed below:

- ☐
- no such person, concern, or organization exists.
-
- ☒
- each such person, concern, or organization is listed below.

Separate statements are required from each named person, concern or organization having rights to the invention stating their status as small entities. (37 CFR 1.27)

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

NAME OF PERSON SIGNING David Weiss

TITLE OF PERSON IF OTHER THAN OWNER

ADDRESS OF PERSON SIGNING 1844 North Nob Hill Road, Suite 233, Plantation, Florida 33322 USASIGNATURE  DATE 02 / 7, 2000

MEDIA BRIDGE METHOD AND APPARATUS

BACKGROUND OF THE INVENTION

1. Field of the Invention;

5 The invention relates to a bridge between tangible media, such as printed media, and computer media. More specifically, the invention is a method and apparatus for hybridizing the subject matter of tangible media with related subject matter in media stored on a computer.

2. Description of the Related Art:

10 In the early 1980s, the popularity of personal computers gave rise to the catchphrase "paperless office" which refers to an environment in which all records are maintained in digital form on computer readable media as opposed to being kept as hard copies on paper. However, the utility and convenience of paper based records has never been matched by computer media. Thus, even when records are maintained in computer readable format, hard copies are often printed out for review.

15 Recent advances in communication, the Internet in particular, have facilitated on-line distribution of various information such as articles, advertisements, and even entire books. The Internet is a worldwide network of computers linked together by various hardware communication links all running a standard suite of protocols known as TCP/IP (transmission control protocol/Internet protocol). The growth of the
20 Internet over the last several years has been explosive, fueled in the most part by the widespread use of software viewers known as browsers and HTTP (hypertext transfer protocol) which allow a simple GUI (graphical user interface) to communicate over the Internet. Browsers generally reside on the computer used to access the Internet, i.e. the client computer. HTTP is a component of TCP/IP and provides users access to
25 files of various formats using a standard page description language known as HTML (hypertext markup language), and more recently XHTML (extensible hypertext markup language). The collection of servers on the Internet using HTTP has become known as the "World Wide Web" or simply the "Web."

30 Through HTML, and interactive programming protocols, the author of a particular Web page(s) is able to make information available to viewers of the Web page(s) by placing the Web page(s) on an Internet Web server in HTML format. The

network path to the server is identified by a URL (Uniform Resource Locator) and, generally, any client running a Web browser can access the Web pages by the URL.

The Web has become ubiquitous in businesses and homes because it has proven to be convenient for various applications, such as news and data delivery, conducting banking and investment transactions, and the like. The Web and its authoring, transmission, and display protocols, such as browsers, HTML, CGI (common gateway interface), Active Server PagesTM, and JavaTM, have become a worldwide standard for information exchange.

However, even the convenience of the Web and the advances in the resolution and size of computer displays has not advanced computer media to the level of comfort and convenience of print media in the eyes of most people. For example, computers and computer displays are too bulky to use as a media for reading the morning newspaper. Some modern computers are very small but generally the displays thereon are also small and have low resolution as compared to the typical magazine or newspaper. Also, there is a certain tactile feel to printed media, such as a glossy magazine or a newspaper, which many people prefer over a computer display.

Further, the Web is analogous to the world's biggest library without a card catalogue. A wealth of information is available but difficult to find. Search engines only serve to reduce the amount of material that the user must manually sift through to find the desired document. Also, from an advertiser's standpoint, printed media, such as a magazine, is desirable because it often remains in the reader's possession, in a visible place, for many days and thus advertisements in printed media often are more effective than web site advertisements which are constantly changing and depend on search engines and other unreliable methods for being viewed. Specifically, search engine criterion can change in a dynamic, and even fickle, manner and thus advertisements on the Internet are not viewed in a reliable manner. Accordingly, even the Web and proliferation of laptop and handheld computing devices has not displaced printed media in many instances.

As disclosed in U.S. patent 5,956,048, it is well known to download books from a network to a portable or handheld computer. Also, many printed articles and advertisements include a printed URL, i.e. a Web address, to permit readers to access additional information about the article or advertised product by manually accessing

the Web. Further, it is well known to download coupons from a computer network, print the coupons on a printer, and take the printed coupons to a retail store for redemption. While each of these technologies incorporates certain aspects of print media and computer media separately, none of these technologies hybridize print
5 media and on-line media in a seamless manner.

SUMMARY OF THE INVENTION

It is an object of the invention to hybridize tangible media with computer media.

It is another object of the invention to combine the flexibility of computer media with the tactile feel and presence of tangible media.

10 It is another object of the invention to distribute coupons and other promotions in a flexible manner.

It is another object of the invention to target promotional media accurately to persons who have expressed an interest in related subject matter.

15 It is another object of the invention to facilitate access to on-line archived content.

It is another object of the invention to facilitate location of desired information on a network such as the Internet.

To achieve these and other objects, the invention provides a seamless bridge or hybridization between tangible media (i.e., media discernable by the human eye
20 without the need for a computing device) and computer media (i.e., media that is readable by a computing device to provide a display discernable by the human eye).

A first aspect of the invention is a computer architecture for providing a bridge between tangible media and computer media comprising a bridge server computer system including a database and a server control program, a client computer system
25 including a bridge control program and an input device adapted to receive a bridge code associated with a tangible media object, and a communications channel coupling the bridge server computer system and the client computer system. The bridge control program is operative to send a bridge code entered through the input device from the client computer system to the bridge server and the server control program is

operative to query the database based on the bridge code and execute action commands contained in the database in correspondence to the bridge code.

5 A second aspect of the invention is a method for bridging tangible media and computer media comprising the steps of creating a database of bridge codes and action commands corresponding to the bridge codes, inputting a bridge code associated with a tangible media object into a client computer system, communicating the bridge code from the client computer system to a bridge server, querying the database based on the bridge code, and executing action commands stored in the database in correspondence to the bridge code.

BRIEF DESCRIPTION OF THE DRAWING

10 The invention is described through a preferred embodiment and the attached drawing in which:

Fig. 1 is a block diagram of a computer architecture of the preferred embodiment;

15 Fig. 2 illustrates an example of a tangible media object of the preferred embodiment.

Fig. 3 is a flowchart of the bridging method of the preferred embodiment; and

Fig. 4 is a table representing the contents of the database of the preferred embodiment.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

20 The preferred embodiment of media bridge system 10 is illustrated in FIG. 1. Client computer system 30, executing browser application 34 that supports the HTTP protocol, is connected typically through an ISP (Internet Service Provider), to the Internet 100. For example, client computer system 30 can be coupled to the ISP via a conventional dial up connection using a modem or through a broadband connection such as ISDN (Integrated Services Digital Network), a cable modem, or a DSL
25 (Digital Subscriber Line) connection. Bridge server computer system 20 is also coupled to the Internet 100 in a known manner. Bridge server computer system 20 executes a Web server control application 24, known as an HTTP server application, stored in a memory. In addition, bridge server computer system 20 can have at least

one, though typically many, Web pages stored in a memory device thereof as files in HTML format and/or other formats. Further, bridge server 20 includes database 22 stored in the memory device as described in detail below.

Content servers 40 can also be connected to client computer system 30 and bridge server computer system 20 through the Internet 100. In the preferred embodiment, the Internet 100 serves as a communication channel. However, any type of communication channel can be used. For example, the communication channel can be a LAN (local area network), a WAN (wide area network), or the like using any type of communication hardware and protocols. Communication can be accomplished over electric cable, fiber optic cable, any other cable, or in a wireless manner using radio frequency, infrared, or other technologies.

Client computer system 30 of the preferred embodiment includes computer 32, a personal computer for example, coupled to the Internet 100 and PDA (personal digital assistant) 38 adapted to be selectively coupled to computer 32 through local communications channel 39. PDA 38 preferably is a handheld device, such as devices sold under the tradename PALM PILOT™ or devices sold under various tradenames adapted to run the WINDOWS CE™ operating system. However, PDA 38 can be any type of portable computing device, thin client, or the like. Computer 32 can request a display of a Web page stored on bridge server 20 by issuing a URL request through the Internet 100 to bridge server computer system 20 in a known manner. A URL consistent with the present invention may be a simple URL of the form:

<protocol identifiers>://<server path>/<web page path>

A "protocol identifier" of "http" specifies the conventional hyper-text transfer protocol. A URL request for a secure Internet transaction typically utilizes the secure protocol identifier "https," assuming that browser 34 and Web server control application 24 are presumed to support and implement the secure sockets layer. The "server path" is typically of the form "prefix.domain," where the prefix is typically "www" to designate a Web server and the "domain" is the standard Internet sub-domain.top-level-domain of bridge server computer system 20. The optional "web page path" is provided to specifically identify a particular hyper-text page maintained on bridge server computer 20 content servers 40, or another server.

In response to a received URL identifying an existing Web page, bridge server computer system 20 can return the Web page, subject to the HTTP protocol, to client computer system 30 for display on client computer system 30. This Web page typically incorporates both textural and graphical information including embedded hyper-text links that permit the user of client computer system 30 to readily select a next URL or send other data over the Internet 100.

The URL issued from client computer system 30 may also be of a complex form that identifies a CGI program (or script) on bridge server computer system 20. The CGI program, permits interactivity between client computer system 30 and bridge server computer system 20 through the Web via HTTP. CGI is a standard for external gateway programs to interface with information servers, such as HTTP or Web servers. A plain HTML document that the Web server delivers is static, which means it doesn't change. A CGI program, on the other hand, is executed in real-time, so that it can output dynamic information, such as the results of a database query. A HTML hyperlink reference that identifies a CGI program is typically of the form:

`<form action=http://www.vendor.com/cgi-bin/bridge.cgi method = post>`

A hyper-text link of this form directs the execution of the bridge.cgi program on an HTTP server, such as bridge server computer system 20 in response to a command from client computer system 30. In the preferred embodiment, bridge.cgi is a routine in server control application 24 of bridge server computer system 20 which queries database 22 and executes instructions based on the query result, as described in detail below.

PDA 38 of client computer system 30 includes input device 36 for inputting a bridge code 154 (see Fig. 2 and the description below) into client computer system 30. Input device 36 of the preferred embodiment is a bar code scanner. However, input device 36 can be a keypad, keyboard, bar code reader, text scanner, image scanner, set of thumb-wheels, or any other device for inputting the bridge code. The bridge code is an identifier, such as a number, a word, alpha-numeric, an image, or the like, for identifying a tangible media object in media bridge system 10. The phrase "tangible media object," as used herein, refers to any object of tangible media, such as a newspaper article, a magazine article, an advertisement, a book, portions thereof, or the like.

Fig. 2 illustrates an example of a tangible media object. Tangible media object 150 of the preferred embodiment is in the form of an article in a newspaper, magazine, or the like. Tangible media object 150 includes body 152 having a title, a byline, text, and an illustration. Tangible media object 150 also includes bridge code 154, in the form of a bar code in the preferred embodiment, and bridge code instructions 156 as text or some other indicator. Conventionally, if a person coming across an article desires to save the article, the person will save the magazine or newspaper, tear the article out of the magazine or newspaper, or photocopy the article. However, these procedures all require that the person catalog or otherwise keep track of the article or copy for later review. Also, these procedures do not permit the article to be edited or otherwise manipulated digitally. On the other hand, the user could scan the article using a known image scanner and possibly convert the scanned image into text with OCR (optical character recognition) software. However, this procedure is tedious.

In the preferred embodiment, the person need only input bridge code 154 into PDA 38, as indicated in bridge code instructions 156 to obtain a digital copy of the article. Fig. 3 illustrates the procedure for obtaining a copy of the article of tangible media object 150. In step A, the user locates tangible media object 150. For example, the person may be reading a magazine and find tangible media object 150 containing an article of interest. In step B, the user reviews bridge code instructions 156 to ascertain what actions will be accomplished by entering bridge code 154 into PDA 38. In this example inputting bridge code 154 will eventually result in the user obtaining a copy of the article. However, it will become apparent below that one or more of many actions can occur as a result of inputting bridge code 154.

Assuming that the action indicated in bridge code instructions 156 is desirable to the user, the user then inputs bridge code 154 by scanning bridge code 154 into PDA 38 using input device 36 in step C. For example, input device 36 can have a wand or raster scanning laser for scanning the bar code of bridge code 154 in a known manner. As a result of step C, bridge code 154 is stored in PDA 38 in accordance with bridge control program 37. Note that bridge control program 37 can be loaded and executed using the conventional user interface of PDA 38. Note that PDA 38 is portable and thus can be readily available at all times to make the collection of bridge

code 154 in steps A through C convenient. For example, collection of bridge code 154 can be accomplished while the person is away from their office, and even on an airplane or at sea, because a continuous connection with computer 32 is not required.

5 In step D, the user decides if the previously scanned bridge code 154 is the last code to be inputted at this time. If not, the procedure can return to step A for execution of steps A through D for any other bridge codes to be scanned. For example, tangible media object 150 may have plural bridge codes and plural corresponding bridge code instructions. One bridge code may be used to obtain a copy of the article, as described above, and another bridge code may be used to view or obtain copies of related articles. Still another bridge code can be used to purchase an item discussed in the article by logging in to a vendor server. Bridge code 154 can be used to accomplish virtually any function related to tangible media object 150, as discussed in greater detail below. Of course, steps A through D can be executed for plural tangible media objects.

15 When all desired bridge codes have been scanned into PDA 38, scanned bridge codes can be uploaded from PDA 38 to computer 32. Ordinarily, the uploading will be accomplished the next time the person returns to their office or other location of computer 32. At this time, PDA 38 is placed in communication with computer 32 through local communication channel 39 in step E. Local communication channel 39 can include a docking station of PDA 38 and a serial link, USB (universal serial bus) link, infrared link (such as an IrDA link), a wireless link such as "bluetooth," or any other hardware and/or software for establishing communication between PDA 38 and computer 32. In step F, the scanned bridge codes are uploaded from PDA 38 to computer 32 in accordance with bridge control program 37 of PDA 38 and bridge control program 35 of computer 32 using standard operator interfaces for initiating the upload.

25 As a result of step F, the scanned bridge codes are stored in computer 32 for uploading to bridge server 20 over the Internet 100. As noted above, computer 32 and bridge server computer system 20 are both connected to the Internet 100. The connections to the internet can be continuous or dial up. In the case of a dial up connection, computer 32 connects to the Internet 100 prior to step G. Once connected to the Internet 100, computer 32 can send a command to bridge server computer

system 20, in the form of a complex URL or other command containing the appropriate bridge code or codes, to search database 22 for action commands associated with the bridge codes stored in computer 32. For example, computer 32 can send a complex URL, having a CGI program request or the like, to bridge server computer system 20, in step G, in response to instructions in bridge control program 35.

In response to the command or plural commands from computer 32, bridge server computer system 20 will query database 22 to find the action commands indicating actions to be taken in response to each bridge code in step H. The action commands in database 22 for each bridge code should correspond to the bridge code instructions for the particular bridge code. For example, in the case of bridge code 154 illustrated in Fig. 2, the action command in database 22 will include instructions for causing a computer media copy of the article in tangible media object 150 to be downloaded to computer 32. The computer media copy of the article in tangible media object 150 can be stored on bridge server computer system 20 or on another computer coupled to the Internet 100, such as one of content servers 40. In the case of the copy being stored on one of content servers 40, the action command in database 22 includes instructions for addressing content server 40 and causing the appropriate download to computer 32. Once again, this can be accomplished through transmission of a complex URL with a CGI program request from bridge server computer system 20 to content server 40.

In step I, the action indicated by action commands stored in correspondence with bridge code 154 in database 22 (downloading a copy of the article to computer 32 in this case) is taken. In step J, it is determined if there are additional bridge codes to be uploaded from computer 32 to bridge server computer system 20. If not, the procedure ends. If so, the procedure returns to step F. It can be seen that, in the preferred embodiment described above, the user merely scanned in a bridge code from a tangible media object to automatically receive a computer media copy of the article in the tangible media object. However, the actions accomplished in response to scanning of the bridge code need not be limited to merely obtaining a copy of the article and in fact can take many forms, as described below.

For example, the action commands stored in database 22 can cause the automatic retrieval and download of a recipe for a meal featured in the article or advertisement of tangible media having a bridge code. Further, the action commands stored in database 22 can cause the automatic retrieval and download of a coupon for a product featured in the article or advertisement of tangible media having a bridge code. The coupon can be printed and taken to a store or the coupon can be retained in computer 32 or PDA 38 of client computer system 30 for download at the point of sale into a vendor computer or thin client. The coupon can include various conditional information such as expiration date data, data indicating a particular store or Web site that can accept the coupon, data indicating time increments through which the discount increases or decreases, data indicating the identity of the user, and the like. The coupon can be redeemed at a conventional “bricks and mortar” retail store or at a Web site over the Internet 100 or another network.

The action commands in database 22 can cause a Web page to be displayed on client computer system 30 which provides links to information related to tangible media object 150 from which bridge code 154 was scanned. For example, bridge code 154 can be in or on a book and the command instructions can cause a Web page to be displayed providing links to Web sites devoted to the author of the novel or other novels by the same author.

Fig. 4 is a representation of a portion of database 22. Of course, database 22 can be stored in computer readable form in known database formats, such as Microsoft EXCEL™, and can include action commands as machine code or the like. However, Fig. 4 represents database 22 as a look-up table having English language action commands 158 for the purpose of explanation. As illustrated in Fig. 4, when bridge code 154 having the value 42709 10028 is scanned, a computer media copy of the article from tangible media 150 will be downloaded to client computer system 30. Similarly, when bridge code 154 having the value 41370 10038 is scanned, a computer media coupon for a product featured in tangible media 150 will be downloaded to client computer system 30. When bridge code 154 having the value 54219 23400 is scanned, a Web page having links related to tangible media 150 will be displayed on client computer system 30. When bridge code 154 having the value 67213 14572 is scanned, a vendor Web page for purchasing goods or services

described in tangible media 150 will be displayed on client computer system 30. When bridge code 154 having the value 67201 15427 is scanned, a Web page containing links to scores of a game discussed in tangible media object 150 and related interview videos is displayed on client computer system 30. When bridge
5 code 154 having the value 47290 28100 is scanned, a Web page having links for travel and booking information for a destination described in tangible media object 150 is displayed. When bridge code 154 having the value 54912 43200 is scanned, a Web page containing links to a review and video preview of a move discussed in tangible media object 150 is displayed.

10 Database 22 can be maintained and updated by a service provider to provide the desired results in response to any bridge code. The action commands can include instructions to utilize a particular folder or directory on client computer system 30 to facilitate organization of material.

It can be seen that the invention bridges the gap between tangible media and
15 computer media by coupling the two media in an integrated manner. However, the invention does not diminish the power of tangible media for persons not having computer access or otherwise not desiring to utilize the invention. Further, the invention is easily integrated in both the tangible media and the computer media without substantial changes to the creation and distribution of the two media. For
20 example bridge codes can easily be inserted into tangible media and action commands can be placed in the database to call up existing contents on the Web. The bridge server can log all transactions conducted as a result of action commands for the purpose of billing vendors, developing customer profiles, or the like. Coupons and the like can be exclusive to the bridge codes, i.e. not available elsewhere and thus can
25 facilitate determination of the effectiveness of an advertisement in the form of a tangible media object.

The client computer system of the preferred embodiment includes a PDA and a computer coupled to the Internet. However, the client computer system can have any configuration that permits entry of bridge codes and communication with the
30 bridge server computer system. For example, the client computer system can be merely a PDA or other thin client coupled to the Internet through a wired or wireless link. Also, the client computer system can be a computer, such as a personal

computer, coupled to the Internet through a wired or wireless link without the need for the PDA. Of course, in such a case, the input device will be on the computer. The communications channel in the preferred embodiment is the Internet. However, any communications channel can be used. The bridge server computer system can include plural computers at one location or at plural locations. The various control programs can be written in any appropriate language and will be apparent to one of ordinary skill in the art based on the disclosure herein.

The input device can assume any form. For example, the bridge codes can be scanned with an optical scanner, inputted manually through a keyboard, keypad, thumbwheels or the like, read from a magnetic strip embedded in the tangible media object, or in any other manner. The bridge codes can be inputted into a smart card that forms a portion of the client computer system and thus obviate the need to have a thin client or computer at the point of inputting the bridge code. For example, the bridge code can be loaded to the smart card from a point of sale display and subsequently downloaded to a computer. The content servers can be associated with any party and can take any form. The bridge code can be a number, an alphanumeric, a word, a symbol, combinations thereof or any other identifying code. The bridge code instructions can include, text, an icon, or any other indication of an action corresponding to the bridge code. Of course, the bridge code instruction is optional. The bridge code and bridge code instructions can be combined into a single code/symbol that identifies the tangible media object to the bridge server and is discernable by the user to indicate an associated action.

In the preferred embodiment, the database query is executed at the bridge server, however, the database, the query, and any other processing can be distributed amongst the client computer, the bridge server or other computers as desired. Processed bridge codes can be deleted from the client computer or saved for reference.

The operator of the bridge server can produce revenue from the invention in various ways. For example, a newspaper or other periodical can pay to have bridge codes assigned to its articles and related action commands stored in the data base. Further the action commands can refer the user to other sources and revenue can be collected from these sources. Advertisers can pay for a bridge code to be assigned to

their advertisements and for related action commands to be stored in the data base. For example, the action commands can drive the user to a Web page devoted for advertising or selling a product. Publisher's can pay to have bridge codes associated with published materials and action commands that direct the user to other materials published by the publisher, such as archive materials.

Further, entertainment producers can put bridge codes in programs for plays, movie and the like to direct the user to related information, promotional materials, directions to nearby restaurants, and the like. Gaming establishments can sue bridge codes to direct customers to handicapping data, online gaming and other related activities. Publishers of research materials can use bridge codes to direct users to related research materials. In each case, the operator of the bridge server can collect revenue based on bridge cod "hits", based on item (e.g. monthly), based on media materials delivered, based on products or services ordered, or in any fashion.

The invention has been described through a preferred embodiment. However various modifications can be made without departing from the scope of the invention as defined by the appended claims and legal equivalents.

WHAT IS CLAIMED:

1. A computer architecture for providing a bridge between tangible media and computer media, said computer architecture comprising:

a bridge server computer system including a database and a server control program;

5 a client computer system including a bridge control program and an input device adapted to receive a bridge code associated with a tangible media object;

a communications channel coupling said bridge server computer system and said client computer system;

10 whereby said bridge control program is operative to send a bridge code entered through said input device from said client computer system to said bridge server and said server control program is operative to query said database based on the bridge code and execute action commands contained in said database in correspondence to the bridge code.

15 2. A computer architecture as recited in claim 1, wherein said client computer system comprises a client computer, a portable client device, and a local communications channel selectively coupling said client computer to said portable client device, said input device being disposed in said portable client device and the bridge code being uploaded from said portable client device to said client computer over said local communications channel.

20 3. A computer architecture as recited in claim 1, wherein the action commands comprise instructions for displaying a Web page stored on one of said bridge server computer system or a separate content server coupled to said communications channel.

25 4. A computer architecture as recited in claim 1, wherein the action commands comprise instructions for downloading data to said client computer system from one of said bridge server computer system or another server coupled to said communications channel.

5. A computer architecture as recited in claim 4, wherein said data comprises a computer media copy of an article in the tangible media object.

6. A computer architecture as recited in claim 4, wherein said data comprises a computer media coupon related to products described in the tangible media object.

7. A computer architecture as recited in claim 4, wherein said data comprises a computer media copy of information related to an article in the tangible media object.

8. A computer architecture as recited in claim 1, wherein the action commands comprise instructions for displaying a link related to the tangible media on said client computer system.

9. A computer architecture as recited in claim 8, wherein the link is in the form of a Web page.

10. A computer architecture as recited in claim 9, wherein the link is to a vendor Web site for facilitating purchase of a product described in the tangible media object.

11. A computer architecture as recited in claim 1, wherein said input device is a bar code reader adapted to read the bridge code in the form of bar codes.

12. A computer architecture as recited in claim 1, wherein said communications channel is a computer network.

13. A computer architecture as recited in claim 13, wherein said computer network is the Internet.

14. A method for bridging tangible media and computer media, said method comprising the steps of:

creating a database of bridge codes and action commands corresponding to the bridge codes;

inputting a bridge code associated with a tangible media object into a client computer system;

communicating the bridge code from the client computer system to a bridge server;

querying the database based on the bridge code; and

executing action commands stored in the database in correspondence to the bridge code.

15. A method as recited in claim 14, wherein the client computer system comprises a client computer, a portable client device, and a local communications channel selectively coupling the client computer to the portable client device, said inputting step comprising inputting the bridge code into the portable client device and uploading the bridge code from the portable client device to the client computer over the local communications channel.

16. A method as recited in claim 14, wherein said executing step comprises executing action commands comprising instructions for displaying a Web page stored on one of the bridge server computer system or a separate content.

17. A method as recited in claim 14, wherein said executing step comprises executing action commands comprising instructions for downloading data to the client computer system from one of the bridge server computer system or another server.

18. A method as recited in claim 17, wherein the data comprises a computer media copy of an article in the tangible media object.

19. A method as recited in claim 17, wherein the data comprises a computer media coupon related to products described in the tangible media object.

20. A method as recited in claim 17, wherein the data comprises a computer media copy of information related to an article in the tangible media object.

21. A method as recited in claim 14, wherein said executing step comprises executing action commands comprising instructions for displaying a link related to the tangible media on the client computer system.

22. A method as recited in claim 21, wherein the link is in the form of a Web page.

23. A method as recited in claim 22, wherein the link is to a vendor Web site for facilitating purchase of a product described in the tangible media object.

24. A method as recited in claim 14, wherein said inputting step comprises reading the bridge code in the form of a bar code.

25. A method as recited in claim 14, wherein said communicating step comprises communicating over a computer network.

26. A method as recited in claim 25, wherein the computer network is the Internet.

MEDIA BRIDGE METHOD AND APPARATUS

ABSTRACT

An apparatus and method for providing a bridge between tangible media and computer media. A bridge server computer system includes a database and a server control program. A client computer system includes a bridge control program and an input device adapted to receive a bridge code associated with a tangible media object. The bridge server computer system and the client computer system are coupled by a communications channel. The bridge control program is operative to send the bridge code from the client computer system to the bridge server and the server control program is operative to query the database based on the bridge code and execute action commands contained in the database in correspondence to the bridge code.

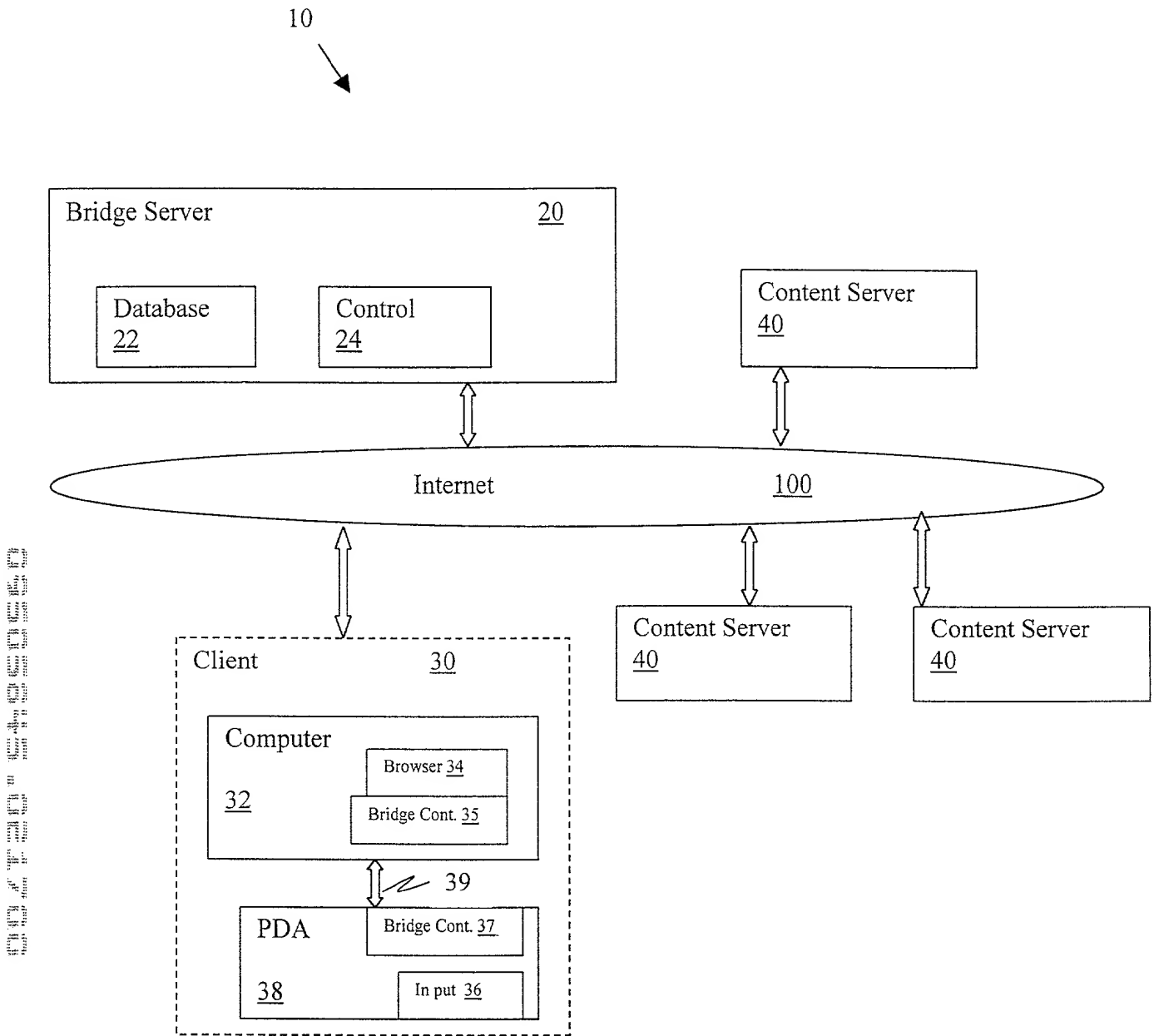


Fig. 1

152



42709 10028



156

154

Fig. 2

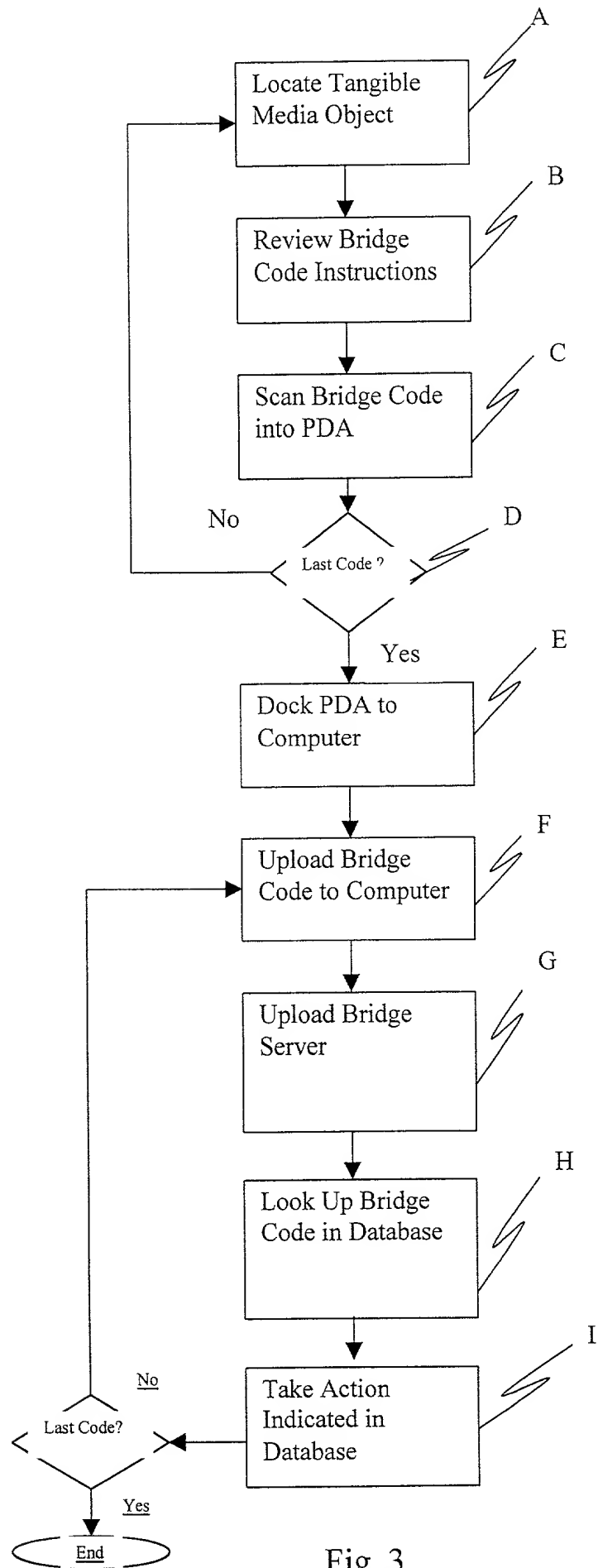


Fig. 3

BRIDGE CODE		ACTION COMMAND	
154	42709 10028	download copy of article in tangible media object to computer	158
	41370 10038	download electronic coupon to computer	
	54219 23400	display Web page having links to articles related to tangible media object	
	67213 14572	display vendor Web page for ordering item in tangible media object	
	67201 15427	display Web page having game scores and related interviews	
	47290 28100	display Web page having travel and booking information	
	54912 43200	display Web page having movie review and preview video	

Fig. 4

DECLARATION AND POWER OF ATTORNEY
FOR PATENT APPLICATION

Attorney Docket No. 2420-0011

As a below named inventor, I hereby declare that: my residence, post office address and citizenship are as stated next to my name; that I verily believe that I am the original, first and sole inventor (if only one name is listed below) or a joint inventor (if plural inventors are named below) of the invention entitled: MEDIA BRIDGE METHOD AND APPARATUS

_____, the specification of which is attached hereto unless the following box is checked:

☐ The specification was filed on
and was assigned Serial No.

(if known)

and was amended on

(if applicable)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of federal Regulations, ' 1.56.

I do not know and do not believe the same was ever known or used in the United States of America before my or our invention thereof, or patented or described in any printed publication in any country before my or our invention thereof, or more than one year prior to this application, that the same was not in public use or on sale in the United States of America more than one year prior to this application, that the invention has not been patented or made the subject of an inventor's certificate issued before the date of this application in any country foreign to the United States of America on an application filed by me or my legal representatives or assigns more than twelve months prior to this application, and that no application for patent or inventor's certificate on this invention has been filed in any country foreign to the United States of America prior to this application by me or my legal representatives or assigns, except as follows:

I hereby claim foreign priority benefits under Title 35, United States Code, ' 119 of any foreign application(s) for patent or inventor's certificate listed below and checked at right:

Prior Foreign Application(s)			Priority Claimed	
(Number)	(Country)	(Month/Day/Year Filed)	Yes	No

All foreign applications, if any, for any Patent or Inventor's Certificate filed more than 12 months prior to the filing

date of this application:

Country	Application No.	Date of Filing (Month/Day/Year)

I hereby claim the benefit under Title 35, United States Code, ' 119(e) or ' 120, as applicable, of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, ' 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, ' 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

Application Serial No.	Filing Date	Status: patented, pending, abandoned

I hereby appoint the following attorneys to prosecute this application and/or any international application and to transact all business in the Patent and Trademark Office connected therewith:

Daniel W. Sixbey, (Reg. No. 20,932)
Charles M. Leedom, Jr. (Reg. No. 26,477)
David S. Safran (Reg. No. 27,997)
Joan K. Lawrence (Reg. No. 29,940)
Jeffrey L. Costellia (Reg. No. 35,483)
Eric J. Robinson (Reg. No. 38,285)
Thomas M. Blasey (Reg. No. 33,475)
Marc S. Kaufman (Reg. No. 35,212)
William J. Healey (Reg. No. 36,160)

Stuart J. Friedman (Reg. No. 24,312)
Gerald J. Ferguson, Jr. (Reg. No. 23,016)
Thomas W. Cole (Reg. No. 28,290)
Donald R. Studebaker (Reg. No. 32,815)
Tim L. Brackett (Reg. No. 36,092)
Robert M. Schulman (Reg. No. 31,196)
Daniel S. Song (Reg. No. 43,143)
Corinne R. Gorski (Reg. No. 34,339)
Robin C. Clark (Reg. No. 40,956)


Send Correspondence to:

NIXON PEABODY LLP
8180 Greensboro Drive, Suite 800
McLean, Virginia 22102
Telephone: (703) 790-9110

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

The undersigned hereby authorize any U.S. attorney or agent named herein to accept and follow instructions from _____ as to any action to be taken in the Patent and Trademark Office regarding this application without direct communication between the U.S. attorney or agent and the undersigned. In the event of a change in the

persons from whom instructions may be taken, the U.S. attorneys or agents named herein will be so notified by the undersigned.

FULL NAME OF SOLE OR FIRST INVENTOR David Weiss	INVENTOR'S SIGNATURE 	DATE 02 17 00
RESIDENCE (City, State & Country) 1844 North Nob Hill Road, Suite 233, Plantation, Florida 33322, United States of America		CITIZENSHIP United States of America
POST OFFICE ADDRESS (Complete Address including City, State & Country) 		